



SPECIAL
PHOTO
ISSUE

NEWSWAVE

FROM THE U.S. DEPARTMENT OF THE INTERIOR:
OCEANS, GREAT LAKES, and COASTS

Sharing the Experience

Summer 2017



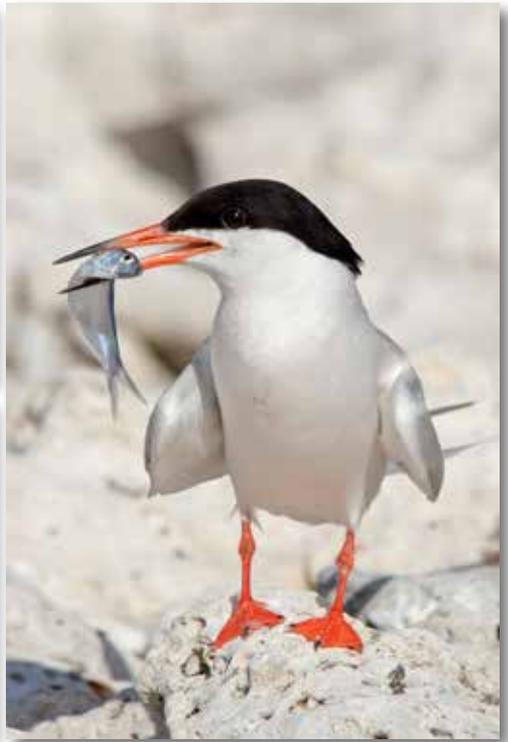


Interior's Diverse Role--

From managing energy resources to conserving wildlife, Interior is a proud steward of our nation's coastal and marine heritage and its unique cultural traditions for the benefit of the American people.



Front cover (clockwise from top left): Sunset at the Great White Heron Refuge in south Florida. Photo credit: Mickey Foster; An aerial view of Tijuana Slough National Wildlife Refuge, CA. Photo credit: Ralph Lee Hopkins with aerial support by LightHawk; Green sea turtle in Bahia Magdalena, Baja California. Photo credit: Jon Avery, USFWS; Foggy marshlands in Parker River National Wildlife Refuge, MA. Photo credit: USFWS; Kayakers explore Biscayne National Park, FL as part of the first-ever Youth Ocean Conservation Summit Field Camp. Photo credit: Gary Bremen, NPS; A park ranger-diver shares the secrets of the kelp forest with remote students via the 'Live Dive' program at Channel Islands National Park, CA. Photo credit: Brett Seymour, NPS; This page (clockwise from top left): BSEE Inspectors pay close attention during a pressure test on a deep-water facility in the Gulf of Mexico. Photo credit: BSEE; Red-billed Tropicbird (*Phaethon aethereus*) in Congo Cay, USVI. Photo credit: José A. Vargas-Santiago; A Tlingit tribal member participated in the grand opening of Xunaa Shuká Hít (ancestral home) celebrating the Huna Káawu's return to Glacier Bay, AK. Photo credit: NPS; NPS scientists report observations of Kittlitz's and marbled murrelets in Glacier Bay National Park and Preserve, AK. Photo credit: Chris Sergeant, NPS; The Research Vessel (R/V) Tiglax supports scientists who study marine life and habitat in the Alaska Maritime National Wildlife Refuge, AK. Photo credit: Paul Wade



Clockwise from top left: Turtles are inspected as part of a global anti-wildlife trafficking initiative. Photo credit: USFWS; The threatened roseate tern, with its bright orange breeding coloring, just had a successful fishing venture. Photo credit: JP Zegarra, USFWS; Walrus like to be in constant contact with other walrus. Photo credit: Ryan Kingsbery, USGS (USFWS Permit No. MA801652-3); A horned puffin in Alaska Maritime National Wildlife Refuge, AK. Photo credit: Cynthia Martinez, USFWS



**Our coastal waters connect us to special places--
From the rocky beaches of the Pacific Northwest to the diverse
corals sheltered among the mangroves in the Caribbean islands.**



This page, clockwise from top: The beach at Trinidad Head, California Coastal National Monument, CA. Photo credit: Bob Wick, BLM; Osprey in nest in Chesapeake Bay, MD. Photo credit: Pete McGowan, USFWS; A wet cypress tree forest in the Red River National Wildlife Refuge, LA. Photo credit: USFWS



Opposite page: Top: Corals usually seen in deeper water grow in very shallow water near the prop roots of red mangrove trees in Hurricane Hole, U.S. Virgin Islands National Park. Photo credit: Caroline Rogers, USGS; Bottom: The late 19th century Ewing Bank Shipwreck provides important seafloor habitat in nearly 2,000 feet water depth in the Gulf of Mexico. Photo credit: Deep Sea Systems International's Global Explorer ROV for BOEM



Interior recognizes the value of such national treasures as seabirds, shipwrecks, and a wide variety of coastal wetlands.





All species of sea turtles are threatened or endangered. Protecting them requires broad stewardship through partnerships across many levels of government.



This page: Top: An adult female green sea turtle feeds on seagrass near Culebra Island off the east coast of Puerto Rico. Photo credit: JP Zegarra, USFWS; Middle: The turtle shell's carapace of a live juvenile green turtle. Photo credit: Margaret Lamont, USGS; Bottom: An endangered hawksbill turtle (*Eretmochelys imbricata*) in the U.S. Virgin Islands. Photo credit: Caroline Rogers, USGS; Opposite page: (clockwise from top left): USGS scientists release a loggerhead sea turtle (*Caretta caretta*) after collecting data and tagging in Dry Tortugas National Park, FL. Photo credit: Brett

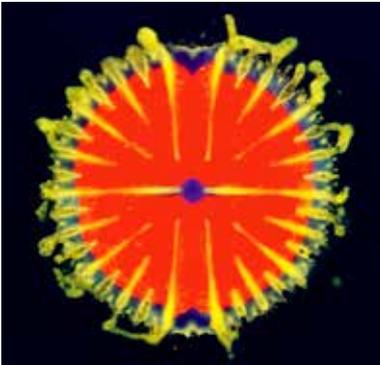


Seymour, NPS; A leatherback hatchling makes its way to the ocean at Cumberland Island National Seashore, GA. Photo credit: NPS; NPS Biologists rescuing green turtles that were hypothetically stunned from cold conditions at Padre Island National Seashore, TX. Photo credit: Donna Shaver, NPS; Desecheo Island National Wildlife Refuge, off the west coast of Puerto Rico has very clear water for good underwater visibility. Photo credit: JP Zegarra, USFWS; Kemp's Ridley Hatchling at Padre Island National Seashore, TX. Photo credit: Donna Shaver, NPS



We are connected to our coastal landscapes-

Coastal lands are of tremendous economic, biological, recreational, and cultural value to the nation. They play important roles in our daily lives. Interior manages resources to ensure they are healthy, used responsibly, and are available for future generations.

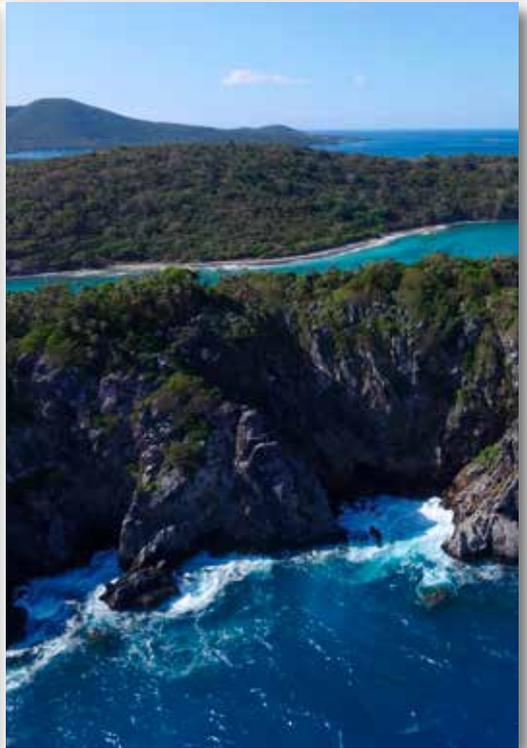
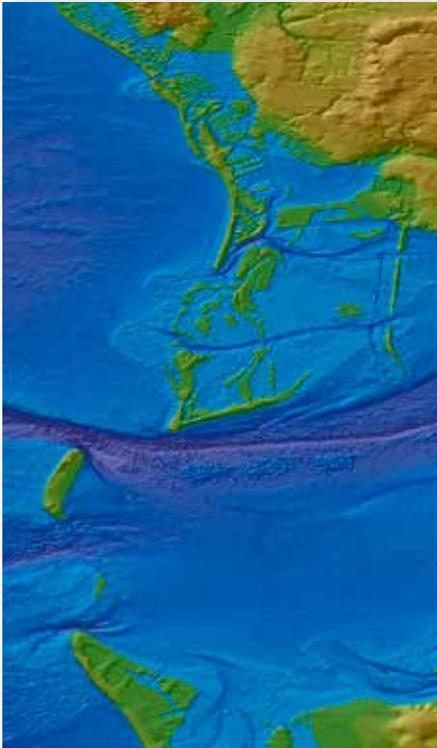


Top: Matt Whitbeck, wildlife biologist at Chesapeake Marshlands National Wildlife Refuge Complex, conducts a plot survey of high-marsh vegetation, including seaside goldenrod, which is important for pollinators like monarch butterflies. Photo credit: Steve Droter; Bottom right: Red and blue color variants of deepwater sculpin from a Lake Ontario prey fish survey aboard the GLSC's R/V Kaho. The blue coloration naturally occurs and is due to a bile pigment called biliverdin that is more prevalent in some individuals. Photo credit: Brian Weidel, USGS; Bottom left: A photomicrograph of a single living cell of a freshwater green alga (*Micrasterias radiosa*), that is illuminated with ultraviolet light. This sample was collected in Loxahatchee National Wildlife Refuge, FL. Photo credit: Barry Rosen, USGS.



Top: White terns breed on the uninhabited Howland Island National Wildlife Refuge which is part of the Pacific Remote Islands Marine National Monument. Photo credit: Megan Nagel, USFWS; Bottom: Red mangrove (*Rhizophora mangle*) roots at Everglades National Park. Photo credit: G. Gardner, NPS





Opposite page (clockwise from top): Looking down on Trunk Bay, part of the U.S. Virgin Islands National Park where USGS and the NPS collaborate to manage sea turtles, coral reefs, mangroves, and seagrass beds within this popular recreational area. Photo credit: Kaitlin Kovacs, Contractor to the USGS; Juvenile lake sturgeon raised at the Genoa National Fish Hatchery in Wisconsin. Photo credit: USFWS; Brown pelicans (left) and snowy plovers (right) were among at least 93 species of birds that were exposed to oil in the 2010 *Deepwater Horizon* spill. DOI's restoration planning addresses a broad diversity of injured bird species. Photo credits: Woody Woodrow, USFWS. This page (clockwise from top): Young students enjoy dipnetting for marine critters at Biscayne National Park. Photo credit: Gary Bremen; Steven Cay, U.S. Virgin Islands. Photo credit: Héctor J. Ruiz Torres, HJR Reefscaping; Topobathymetric map of the mouth of Tampa Bay where it enters the Gulf of Mexico, FL. Image credit: Dean Tyler, USGS



Coastal Culture-- Get Involved, Make a Difference

Clockwise from top left—

A young student volunteers to strengthen the coast in New Jersey. USGS scientists teach journalists about invasive species in Louisiana and monitor sea urchin populations in Hawaii.

The Huna Tribal House dedication in August of 2016 brought this coastal community together to celebrate with rich cultural traditions, including the carving of two totem poles that were created especially for the Tribal House in Southeast Alaska.



Photo credits: (clockwise from top left): Project PORTS; Ann Tihansky, USGS; Dave Forcucci, Undersea Images; NPS; NPS